

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO:	CONFIRMATION NO	
10/715,115	11/18/2003	Sarkis Tokatlian	32406-198948	3992	
26694	7590 10/01/2004		EXAMINER		
VENABLE, P.O. BOX 34	, BAETJER, HOWAR	LEWIS, A	LEWIS, AARON J		
	ON, DC 20043-9998		ART UNIT	PAPER NUMBER	
	•		3743		

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

					Λ /\		
Office Action Summary		Appl	ication No.	Applicant(s)	100		
		10/7	15,115	TOKATLIAN, SAR	KIS		
		Exan	niner	Art Unit			
			ON J. LEWIS	3743			
T Period for R	he MAILING DATE of this commun eply	ication appears o	n the cover sheet with t	the correspondence add	dress		
THE MA  - Extension after SIX (  - If the peric - If NO peri - Failure to Any reply	TENED STATUTORY PERIOD F LING DATE OF THIS COMMUN s of time may be available under the provisions (6) MONTHS from the mailing date of this commod of for reply specified above is less than thirty (3 od for reply is specified above, the maximum st reply within the set or extended period for reply received by the Office later than three months a tent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In nunication. 0) days, a reply within the atutory period will apply will, by statute, cause the	no event, however, may a reply ne statutory minimum of thirty (3I and will expire SIX (6) MONTHS ne application to become ABANI	be timely filed  O) days will be considered timely  from the mailing date of this co			
Status							
1) <u></u> Re	sponsive to communication(s) file	ed on					
2a) Th	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition	of Claims						
4a) 5)	Claim(s) 1-17 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) is/are allowed.  Claim(s) 1-3,9-11 and 15-17 is/are rejected.  Claim(s) 4-8 and 12-14 is/are objected to.  Claim(s) are subject to restriction and/or election requirement.						
Application	Papers		*•				
10)☐ The Ap Re	e specification is objected to by the drawing(s) filed on is/are plicant may not request that any objected to atthe or declaration is objected to	a) accepted of ac	g(s) be held in abeyance. equired if the drawing(s)	. See 37 CFR 1.85(a). is objected to. See 37 CF			
Priority und	er 35 U.S.C. § 119						
a)⊠ / 1.[ 2.[ 3.[	cnowledgment is made of a claim  All b) ☐ Some * c) ☐ None of:  ☐ Certified copies of the priority ☐ Copies of the certified copies application from the Internation the attached detailed Office action	documents have documents have of the priority do onal Bureau (PCT	been received. been received in App cuments have been re Rule 17.2(a)).	lication No ceived in this National	Stage		
Attachment(s)			[2]				
2) Notice of 3) Informati	References Cited (PTO-892) Draftsperson's Patent Drawing Review (fon Disclosure Statement(s) (PTO-1449 or etc.)/Mail Date		Paper No(s)/M	nmary (PTO-413) fail Date mal Patent Application (PTC	)-152)		

Art Unit: 3743

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3,9,10,15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taelman (WO 97/10991) in view of Berge ('145) and Diggs ('201).

As to claim 1, Taelman discloses a sub-aqua breathing system comprising a housing (11) configured, in use, to float on the surface of a body of water (fig.1), said housing containing buoyant material (page 6, lines 3-4 of the Description of the Preferred Embodiment) and a compressed air tank (12) connectable to an air line (13) feeding a mouthpiece regulator (19).

The differences between Taelman and claim 1 are the tank being toroidal in shape and the housing includes a storage compartment for retaining at least one air line therein and means for deploying said at least one air line from said compartment when the system is used.

Berge, in a sub-aqua breathing system teaches an air tank (1) which is toroidal in shape.

It would have been obvious to modify the shape of the air tank of Taelman to be toroidal in shape because it would have provided it with a nautical shape thereby making it easier to notice on the surface of the water as a piece of underwater breathing

Application/Control Number: 10/715,115

Art Unit: 3743

equipment and because it would have made the air tank easier to carry for a diver as taught by Berge.

Diggs, in a sub-aqua breathing system teaches a housing (25) having a storage compartment (reel 26) for retaining at least one air line (21) therein and means (33,34) for deploying said at least one air line from said compartment when the system is used for the purpose of storing an air line of sufficient length to allow deep diving and for the purpose of providing safe storage of un-used portions of the air line during use and safe storage of all of the air line when the device is not in use.

It would have been obvious to modify the sub-aqua breathing system of Taelman to include a storage compartment for retaining at least one air line and including means for deploying the air line because it would have provided a means for storing enough length of air line to allow for deeper diving and because it would have provided a means for safe storage of un-used portions of the air line during use and safe storage of the air line when the device is not in use as taught by Diggs.

As to claim 2, Diggs (fig.1) teaches said means is operable to partially deploy said at least one air line from the housing when the system is used.

As to claim 3, Taelman (figs.2,3) as modified by Berge teach the buoyant material is disposed regions around the periphery of the toroidal compressed air tank.

As to claim 9, Taelman as modified by Berge and Diggs teach at least one air line coiled within the storage compartment (fig.3 of Diggs), each air line having one end connected, via an air flow control valve (18 of Taelman), to the toroidal compressed air tank.

Application/Control Number: 10/715,115

Art Unit: 3743

As to claim 10, Taelman discloses a removable cover (23) being mounted on the housing to provide access to the interior thereof.

As to claim 15, the housing of Taelman as modified by Berge teach the housing has a discus-like shape.

As to claim 16, while Taelman as modified by Berge and Diggs do not expressly disclose a light mounted on the housing, official notice is taken that the use of visual indicators mounted on the housing of sub-aqua breathing systems including lights is a well known expedient for the purpose of providing a visual indicator of diver location as such would have been obvious to include such in Taelman. Exemplary evidence of indicators mounted on sub-aqua breathing systems is illustrated by the use of a diving pennant in Miller ('849).

As to claim 17, any air trapped between the tank (12) and the float (11) in Taelman would provide additional buoyancy thereto.

3. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taelman in view of Berge and Diggs as applied to claims 1-3,9,10,15-17 above, and further in view of Miller ('849).

The difference between Taelman as modified by Berge and Diggs and claim 11 is a mast with a diving pennant attached thereto.

Miller, in a sub-aqua breathing system, teaches a diving pennant (24) attached to the housing for the purpose of indicating the location of divers.

Art Unit: 3743

It would have been obvious to further modify Taelman to include a diving pennant attached to the housing because it would have indicated the location of divers as taught by Miller.

## Allowable Subject Matter

4. Claims 4-8,12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The balance of the art is cited to show relevant sub-aqua breathing systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON J. LEWIS whose telephone number is (703) 308-0716. The examiner can normally be reached on 9:30AM-6:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY A. BENNETT can be reached on (703) 308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/715,115

Art Unit: 3743

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

AARON J. LEWIS Primary Examiner Art Unit 3743 Page 6

Aaron J. Lewis September 22, 2004